



SEQUENCE LISTING

Meloen, Robert Hans
Oonk, Hendrica Berendina

<120> An Improved Peptide, Immunogenic Composition and Vaccine or Medical Preparation, a Method to Immunise Animals Against the Hormone LHRH, and Analogs of the LHRH Tandem Repeat Peptide and their Use as Vaccine

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<150> US 09/274,048

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<151> 1995-06-07

<150> PCT/NL96/00223

<151> 1996-06-06

<150> US 08/447,298

<151> 1995-06-07

<150> US 08/476,013

<151> 1995-06-07

<160> 13

<170> PatentIn version 3.0

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<212> PRT

<213> Sus scrofa

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<222> (1)..(1)

<223> X=pyroglutamic acid

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<222> (10)..(10)

<223> X=Gly-NH2

Sub-E1
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Xaa His Trp Ser Tyr Gly Leu Arg Pro Xaa
1 5 10

<210> 2

<211> 10

<212> PRT

<213> Homo sapiens

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<223> X=pyroglutamic acid

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<223> X=Gly-NH2

Cont.
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Xaa His Trp Ser His Gly Trp Tyr Pro Xaa
1 5 10

<210> 3

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<213> artificial

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<223> A peptide suitable for eliciting an immune response against forms
GnRH/ LHRH

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<222> (1)..(1)

<223> X=pyroglutamic acid or Gln with attached tail of one or more additional amino acid

but E1
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<222> (3)..(3)

<223> X=Trp or N(indole)formyl-tryptophan

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<223> X=direct bond or a spacer group between Gly at position 10 and Gl
n at position 1

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<223> X=Trp or N(indole)formyl-tryptophan

D'
cont.
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<222> (20)..(20)

<223> X=Gly-NH₂ or Gly with attached tail of one or more amino acids

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<223> variable repeat sequence <10-20

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Xaa His Xaa Ser Tyr Gly Leu Arg Pro Gly Xaa His Xaa Ser Tyr Gly

1 5 10 15

Leu Arg Pro Xaa

20

<210> 4

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<212> PRT

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GnRH/ LHRH

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<223> X=pyroglutamic acid

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<222> (6)..(6)

<223> X=D-Lys

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<222> (11)..(11)

<223> X=Gly or Gly preceded by a spacer

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<222> (16)..(16)

<223> X=D-Lys

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<222> (21)..(21)

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Leu Arg Pro Gly Xaa
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GnRH/ LHRH

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but E1
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D'
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1

5

10

15

Leu Arg Pro Gly Xaa

20

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<222> (8)..(8)

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220-21
cat
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<222> (18)..(18)

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Leu Xaa Pro Gly Xaa

20

cut E1

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GnRH/ LHRH

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D'
cont

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Def E1

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1 5 10 15

Leu Arg Pro Xaa Xaa
20

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GnRH/ LHRH

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Sub E1
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Leu Arg Pro Gly Cys Xaa His Thr Ser Tyr Xaa Leu Arg Pro Gly Xaa

20 25 30

His Thr Ser Tyr Xaa Leu Arg Pro Gly Cys

35 40

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GnRH/ LHRH

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Part E1

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<223> X=Gly or Gly preceded by a spacer

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<222> (16)..(16)

<223> X=D-Lys

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Leu Ala Pro Gly Xaa
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<223> A peptide suitable for eliciting an immune response against forms
GnRH/ LHRH

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ent B1 <223> X=amino acid substitution with acetyl group

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<222> (11)..(11)

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<222> (16)..(16)

<223> X=D-Lys

D' ent. <220>

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<222> (21)..(21)

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Leu Arg Pro Gly Xaa

20

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GnRH/ LHRH

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Def B1

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<222> (15)..(15)

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<222> (16)..(16)

<223> X=D-Lys

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Leu Arg Pro Gly Xaa

20

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GnRH/ LHRH

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cont.

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Xaa Arg Pro Gly Xaa
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but E!

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<223> A peptide suitable for eliciting an immune response against forms
GnRH/ LHRH

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<223> X=Cys-NH2

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1 5 10 15

Leu Arg Xaa Gly Xaa

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